

Sep 25, 2012

**Commission on Isotopic Abundances and Atomic Weights (CIAAW)**

Opinion regarding the redefinition of the mole

The International System of Quantities (ISO 80000) and the SI recognize the amount-of-substance and the number of entities as two distinct quantities. The CIAAW does not share this view. Both of these quantities refer to the same property of matter and the distinction between the two is man-made and unnecessary. The Commission considers mole as the SI unit of both of the above quantities and 'one specified entity' as the atomic unit of both of the above quantities. Furthermore, the Commission does not wish to alter the current definition of dalton but wishes to emphasize that the current definition of the Avogadro constant (molar number of entities) is unwieldy. It is our opinion that the Avogadro constant should be defined as the number of entities each weighing 1 Da that form a mass of 1 g, as it was done by Perrin, Curie, and Einstein.

Dr. Juris Meija  
Secretary, CIAAW